CONTENTS
Volume 22

Number 1, July 1984

PHOTOPERIODIC ALTERATION OF POSTPARTUM REPRODUCTIVE FUNCTION IN SUCKLED COWS
P.J. Hansen and E.R. Hauser..... 1

INFLUENCE OF ELEVATED AMBIENT TEMPERATURE AFTER BREEDING ON PLASMA CORTICOIDS, ESTRADIOL AND PROGESTERONE IN GILTS
T.A. Hoagland and R.P. Wettemann..... 15

EFFECTS OF CENTRIFUGATION, GLYCEROL LEVEL, COOLING TO 5°C, FREEZING RATE AND THAWING RATE ON THE POST-THAW MOTILITY OF EQUINE SPERM
J.D. Cochran, R.P. Amann, D.P. Froman and B.W. Pickett..... 25

FERTILITY OF STALLION SEMEN PROCESSED, FROZEN AND THAWED BY A NEW PROCEDURE
M.J. Cristanelli, E.L. Squires, R.P. Amann and B.W. Pickett.. 39

EFFECTS OF PROGESTERONE ADMINISTERED TO DAIRY HEIFERS ON SENSITIVITY OF COPORA LUTEA TO $PGF2^{\alpha}$ AND ON PLASMA LH CONCENTRATION
P.J. Battista, C.E. Rexroad, Jr. and W.F. Williams..... 47

ESTRUS SYNCHRONIZATION AND PREGNANCY RATES IN CYCLIC AND NONCYCLIC BEEF COWS AND HEIFERS TREATED WITH SYNCRO-MATE B OR NORGESTOMET AND ALFAPROSTOL
W.E. Beal, G.A. Good and L.A. Peterson..... 59

EFFECTS OF REPETITIVE NORGESTOMET TREATMENTS ON PREGNANCY RATES IN CYCLIC AND ANESTROUS BEEF HEIFERS
A.M. Ghallab, R.S. Ott, G.F. Cmarik, D.J. Kesler, D.B. Faulkner and J.E. Hixon..... 67

EFFECT OF CLOMIPHENE CITRATE ON PITUITARY RESPONSIVEMESS TO GONADOTROPIN RELEASING HORMONE IN RAMS AND WETHERS
P.M. Zavos, M.G. Burchett and L.A. Edgerton..... 75

MOBILITY OF TWIN EMBRYONIC VESICLES IN MARES
O.J. Ginther..... 83

THE DAY OF THE ESTROUS CYCLE THAT FSH IS STARTED AND SUPEROVULATION IN CATTLE
L.E. Donaldson..... 97

PSEUDORABIES VIRUS INFECTION OF SIX- AND TEN-DAY-OLD PORCINE EMBRYOS
S.R. Bolin and C.A. Bolin..... 101

Number 2, August 1984

A REVIEW OF OVARIAN FOLLICULAR CYSTS IN COWS, WITH COMPARISONS TO THE CONDITION IN WOMEN, RATS AND RABBITS
W.H. Eyestone and R.L. Ax..... 109

RELATIONSHIP OF SCROTAL CIRCUMFERENCE AND TESTICULAR VOLUME TO AGE AND BODY WEIGHT IN THE SWAMP BUFFALO (Bubalus bubalis)
T.A. Bongso, M.D. Hassan and W. Nordin..... 127

REMOVAL OF SWINE ZONAE PELLUCIDAE WITH SEQUENTIAL EXPOSURES TO PRONASE AND ACIDIFIED MEDIUM
W.M. Graves, D. Olds and L.A. Edgerton..... 135

LAPAROSCOPIC INVESTIGATION OF THE BOVINE OVARY IN THE PERIOVULATORY PHASE OF THE CYCLE
C. Bernard, R.D. Lambert, R. Béland and A. Bélanger..... 143

IN VITRO FERTILIZATION AND CLEAVAGE OF IN VIVO MATURED BOVINE OOCYTES
T. Greve, D. Bousquet, W.A. King and K.J. Betteridge..... 151

SURVIVAL RATE TO TERM OF CHIMERIC MORULAE PRODUCED BY AGGREGATION OF FIVE TO NINE EMBRYOS IN THE MOUSE, MUS MUSCULUS
R.M. Petters and R.V. Mettus..... 167

CHANGES IN PROFILES OF SERUM SEX STEROIDS OF MALE BUFFALOES FROM BIRTH TO MATURITY
I.J. Sharma, S.P. Agarwal, V.K. Agarwal and P.K. Dwaraknath... 175

THE EFFECT OF DAYS POSTPARTUM, INDOMETHACIN AND OXYTOCIN ON PROSTAGLANDIN METABOLITE CONCENTRATIONS IN POSTPARTUM SUCKLED BEEF COWS
T.R. Troxel, M.J. Opsomer and D.J. Kesler..... 187

SEMEN CHARACTERISTICS OF MUTURU BULLS - Bos brachyceros
B.I. Orji, G. Igboeli and L.N. Nwakalor..... 197

DOSE OF FSH-P AS A SOURCE OF VARIATION IN EMBRYO PRODUCTION FROM SUPEROVULATED COWS
L.E. Donaldson..... 205

POSTFIXATION EMBRYO REDUCTION IN UNILATERAL AND BILATERAL TWINS IN MARES
O.J. Ginther..... 213

ULTRASONOGRAPHY FOR DETECTION OF PREGNANCY AND STUDY OF EMBRYONIC DEVELOPMENT IN HEIFERS
R.A. Pierson and O.J. Ginther..... 225

Number 3, September 1984

BOOK REVIEW: CONSTITUTIONAL DISORDERS AND HEREDITARY DISEASES IN DOMESTIC ANIMALS
H.W. Leipold..... 235

TIAMULIN, A NEW ANTIBIOTIC FOR ELIMINATING MYCOPLASMAS FROM BOVINE SEMEN 1. Investigations on Spermatozoal Toxicity
A. Holzmann, G. Laber and G. Gumhold..... 237

RADIOIMMUNOASSAY OF CORTISOL IN PERIPHERAL BLOOD PLASMA OF BUFFALOES PERIPARTUM
B.S. Prakash and M.L. Madan..... 241

SERUM AND MILK PROGESTERONE IN SYNCRO-MATE-B TREATED POSTPARTUM BEEF COWS
T.A. Hoagland and M.A. Barnes..... 247

VARIATION IN TESTOSTERONE PRODUCTION AMONG BOARS AND ITS RELATIONSHIP TO SEXUAL INTEREST AND BREEDING PERFORMANCE
P.E. Juniewicz, V.D. Toelle, O.W. Robison and B.H. Johnson... 259

ACTIVE IMMUNIZATION OF PREPUBERTAL BULLS AGAINST TESTOSTERONE: SEMINAL AND TESTICULAR CHARACTERISTICS AFTER PUBERTY
M.P. Walker, D.L. Thompson, Jr., R.A. Godke and P.G. Honey.... 269

DURATION OF THE BREEDING SEASON AND RESPONSE TO REPRODUCTIVE MANIPULATION IN FIVE BREEDS OF SHEEP UNDER NORTHERN PRAIRIE CONDITIONS
I.A. Jeffcoate, N.C. Rawlings and W.E. Howell..... 279

A FIELD STUDY OF THE FERTILITY OF TRANSPORTED EQUINE SEMEN
D.H. Douglas-Hamilton, R. Osol, G. Osol, D. Driscoll and H. Noble..... 291

RELATIONSHIP BETWEEN LH AND CORTISOL IN ACUTELY STRESSED BEEF COWS
S.E. Echternkamp..... 305

INFLUENCE OF NUMBER OF GILTS PER PEN ON ESTROUS TRAITS IN CONFINEMENT-REARED GILTS
R.K. Christenson..... 313

Number 4, October 1984

FSH RECEPTORS IN THE BOVINE CORPUS LUTEUM
J.G. Manns, G.D. Niswender and T. Braden..... 321

BLOOD LEVELS OF PROGESTERONE AND 15-KETO-13, 14-DIHYDRO PROSTAGLANDIN $F_{2\alpha}$ DURING THE ESTROUS CYCLE OF OXYTOCIN-TREATED COWS
E.O. Oyedipe, B. Gustafsson and H. Kindahl..... 329

BREEDING SOUNDNESS AND SEX DRIVE BY BREED AND AGE IN BEEF BULLS USED FOR NATURAL MATING
P.J. Chenoweth, P.W. Farin, E.R. Mateos, G.P. Rupp and J.E. Pexton..... 341

SURGICAL REPAIR OF THE LACERATED CERVIX IN THE MARE
J.S. Brown, D.D. Varner, K. Hinrichs and R.M. Kenney..... 351

PATTERNS OF PUBERAL DEVELOPMENT IN SAHIWAL AND BRAHMAN CROSS BULLS IN TROPICAL AUSTRALIA. I. GROWTH AND SEMEN CHARACTERISTICS
S. Wildeus, R.G. Holroyd and K.W. Entwistle..... 361

PATTERNS OF PUBERAL DEVELOPMENT IN SAHIWAL AND BRAHMAN CROSS BULLS IN TROPICAL AUSTRALIA II. LH and TESTOSTERONE CONCENTRATIONS BEFORE AND AFTER GnRH
S. Wildeus, K.W. Entwistle and R.G. Holroyd..... 375

POSTPARTUM OXYTOCIN TREATMENT FOR PREVENTION OF RETAINED PLACENTAS
B.J. Miller and J.R. Lodge..... 385

DIRECT FREEZING OF CATTLE EMBRYOS AFTER PARTIAL DEHYDRATION AT ROOM TEMPERATURE
N. Bui-Xuan-Nguyen, Y. Heyman and J.P. Renard..... 389

CHARACTERIZATION OF INTRAUTERINE MOBILITY OF THE EARLY EQUINE CONCEPTUS
G.S. Leith and O.J. Ginther..... 401

EXTENDERS FOR PRESERVATION OF CANINE AND EQUINE SPERMATOZOA AT 5°C
C.A. Province, R.P. Amann, B.W. Pickett and E.L. Squires..... 409

SERUM TESTOSTERONE LEVELS IN YOUNG NORMAL HORSES
M.J. Hamilton, I.M. Hughes and G.A. Hegreberg..... 417

NONSURGICAL COLLECTION OF BLASTOCYSTS FROM DAIRY GOATS
R.H. BonDurant, S. Skirrow, G.B. Anderson, F. Hanson and W.H. Rogers..... 423

ONE-STEP SUCROSE DILUTION OF FROZEN-THAWED SHEEP EMBRYOS
D.A. Merry, K.R. Bondioli, R.L. Allen and R.W. Wright, Jr. 433

THE EFFECT OF OVARIECTOMY ON BROODINESS AND PLASMA PROLACTIN LEVELS IN TURKEY HENS DURING A PHOTO-INDUCED REPRODUCTIVE CYCLE
T.D. Siopes and W.H. Burke..... 445

Number 5, November 1984

STUDIES ON FOLLICULAR PATTERNS IN BUFFALO-HEIFERS
Gurdial Singh, G.B. Singh and S.S. Sharma..... 453

MORPHOLOGICAL CHARACTERISTICS OF STALLION SPERMATOZOA
K.F. Dowsett, H.G. Osborne and W.A. Pattie..... 463

THE INFLUENCE OF ESTRADIOL-17β AND PROGESTERONE ON PERIPHERAL SERUM CONCENTRATIONS OF LUTEINIZING HORMONE AND FOLLICLE STIMULATING HORMONE IN THE OVARIECTOMIZED EWE
N.C. Rawlings, I.A. Jeffcoate and D.L. Rieger..... 473

ONSET OF THE PREOVULATORY LH SURGE AND OF OESTRUS IN INTACT EWES: NIGHT IS A PREFERRED PERIOD
C. Fabre-Nys, G.B. Martin, Y. Cognié and J.C. Thiéry..... 489

SEASONAL VARIATIONS IN SERUM LEVELS OF THYROID HORMONES AND THEIR RELATION WITH SEMINAL QUALITY AND LIBIDO IN BUFFALO BULLS
N.K. Dixit, S.P. Agarwal, V.K. Agarwal and P.K. Dwaraknath.... 497

INDUCTION OF PARTURITION IN SWINE WITH A PROSTAGLANDIN ANALOG AND OXYTOCIN: A TRIAL INVOLVING DOSE OF OXYTOCIN AND PARITY
C. Welp, W. Jöchle and W. Holtz..... 509

PREGNANCY RATES WITH BISECTED BOVINE EMBRYOS
T.J. Williams, R.P. Elsden and G.E. Seidel, Jr. 521

ANTIFERTILITY EFFECT OF BUSULFAN AND DL-6-(N-2-PIPECOLINOMETHYL)-5-HYDROXY-INDANE MALEATE (PMHI) IN COYOTES (CANIS LATRANS)
J.N. Stellflug, C.W. Leathers and J.S. Green..... 533

SPERM CONCENTRATION IN DIFFERENT SEGMENTS OF THE GOAT EPIDIDYMIS
S.K. Jindal..... 545

RECOVERY RATE AND QUALITY OF EMBRYOS COLLECTED FROM SUCKLED COWS AND BEEF HEIFERS AFTER SUPEROVULATION WITH PMSG
M. Olivera-Angel, H.-J. Voss and W. Holtz..... 553

BODY SIZE AND PELVIC AREA RELATIONSHIPS AT PUBERTY AND TWO-MONTH PREGNANCY IN BUFFALO-HEIFERS
Gurdial Singh, G.B. Singh, S.S. Sharma and R.D. Sharma..... 563

UNILATERAL HYDROSALPINX AND ABSENCE OF THE INFUNDIBULUM IN A MARE
K. Hinrichs, R.M. Kenney and J.P. Hurtgen..... 571

EFFECT OF LITTER SIZE ON BLOOD HAEMATOCRIT AND LIVEWEIGHT IN BOOROOLA MERINO AND MERINO EWES DURING PREGNANCY AND THE POST-PARTUM PERIOD
J.L. Owens, B.M. Bindon, T.N. Edey and L.R. Piper..... 579

PLASMA PROLACTIN IN RELATION TO CHANGES IN OESTROUS CYCLICITY FOLLOWING OLFACTORY BULBECTOMY IN POST-PUBERTAL PIG
W.D. Booth, G.R. Foxcroft and B.A. Baldwin.....587

THE EFFECTS OF EDTA-TRIS INFUSION ON THE EQUINE ENDOMETRIUM
R.S. Youngquist, T.L. Blanchard, D. Lapin and W. Klein.....593

DEVELOPMENTAL POTENTIAL OF ISOLATED BLASTOMERES FROM EARLY MURINE EMBRYOS
M.J. O'Brien, E.S. Critser and N.L. First.....601

CHIMERISM IN CATTLE THROUGH MICROSURGICAL AGGREGATION OF MORULAE
G. Brem, H. Tenhumberg and H. Kräusslich.....609

Number 6, December 1984

PREGNANCY DIAGNOSIS IN THE DOMESTIC HORSE THROUGH DIRECT URINARY ESTRONE CONJUGATE ANALYSIS
K.L. Evans, L.H. Kasman, J.P. Hughes, M. Cuoto and B.L. Lasley..... 615

EFFECT OF COLD SHOCK AND FREEZING ON LOSS OF TOTAL LIPIDS AND PHOSPHOLIPIDS OF BUFFALO SPERMATOZOA (Bubalus bubalis)
B.C. Sarmah, M.L. Kaker and M.N. Razdan..... 621

THERIOGENOLOGY

EFFECTS OF EXPERIMENTAL TRYPANOSOMA VIVAX ON FERTILITY OF HEIFERS
D. Ogwu, C.O. Njoku, D.I.K. Osori, C.D. Ezeokoli and J. Kumi-Diaka..... 625

SUPEROVULATORY RESPONSES IN FSH- OR PERGONAL®-TREATED HEIFERS
A.A. Alcivar, R.R. Maurer and L.L. Anderson..... 635

ANEMIA ASSOCIATED WITH ANESTRUS IN BEEF HEIFERS INOCULATED WITH ANAPLASMA MARGINALE: ENDOCRINOLOGY AND OVARIAN CHANGES
B.L. Swift, W.J. Murdoch and R.R. Dahlgren..... 643

AGE-RELATED CHANGES IN BODY WEIGHT, SCROTAL SIZE AND PLASMA TESTOSTERONE LEVELS IN BUFFALO BULLS (Bubalus bubalis)
Manzoor Ahmad, M. Latif, Masood Ahmad, M.H. Qazi, N. Sahir and M. Arslan..... 651

COMPOSITION OF THE FETAL FLUIDS IN AFRICAN ANTELOPES
P. Hradecký..... 657

RELATIONSHIPS BETWEEN GROWTH PARAMETERS AND SCROTAL CIRCUMFERENCE IN YOUNG BEEF BULLS
M. Makarechian, A. Farid and R.T. Berg..... 667

LAPAROSCOPIC EMBRYO TRANSFER IN DOMESTIC SHEEP: A PRELIMINARY STUDY
M.C. Schiewe, M. Bush, L.S. Stuart and D.E. Wildt..... 675

EFFECT OF GONADOTROPIN-RELEASING HORMONE, STAGE OF SEXUAL MATURATION AND 6-METHOXYBENZOXAZOLINONE ON PLASMA GONADOTROPINS, OVARIAN DEVELOPMENT AND UTERINE WEIGHT IN PREPUBERAL GILTS
H.D. Guthrie, V.G. Pursel, D.J. Bolt and R.J. Nachman..... 683

EMBRYO TRANSFER AS A MEANS OF CONTROLLING THE TRANSMISSION OF VIRAL INFECTIONS (V. The in vitro exposure of zona pellucida-intact porcine embryos to African swine fever virus)
Elizabeth Singh, G.C. Dulac and W.C.D. Hare..... 693